13

Monitors

HDM-20E1U 186
HDM-14E1U 187
HDM-14E5U 188
PHM-20M8U.....189
PHM-14M8U.....190
BVM-20E1U/20E1E.....191
BVM-20F1U/20F1E 192
BVM-20G1U/20G1E.....193
BVM-14E1U/14E1E.....194
BVM-14E5U/14E5E.....195
BVM-14F1U/14F1E 196
BVM-14F5U/14F5E 197
BVM-14G1U/14G1E.....198
BVM-14G5U/14G5E.....199
BVM-14M4DE.....200
BVM-8045QD/9045D 201
Optional Accessories.....202

New

HDM-20E1U (NTSC)

Digital HDVS

20-inch (19-inch*) HD color monitor

•HR Trinitron® assures a high resolution of 850 TV lines (16:9 mode) •SMPTE-C standard phosphors •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Built-in YP_BP_R/RGB inputs •HD SDI (High Definition Serial Digital Interface) input available as an option •Accepts signals with field frequency 59.94 or 60.00 Hz •Accepts signals with Active line 1035 & 1080 •Frequency response 30 MHz •Aspect ratio is switchable between 16:9 and 4:3 •4:3 Area Marker to find the 4:3 area inside the 16:9 picture •Serial remote control capability (mutual control with BVM-E/F/G Series) •Controlled with BKM-10R/11R

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			HDM-20E1U
General	System		1125/1080 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 274M) 1125/1035 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 240M) 525 59.94 Hz 1:1 16:9 (SMPTE 293M)
	Power requirements		100 V to 240 V AC ±10 % 50/60 Hz
	Power consumption		195 W max.
	Dimensions		444 (W) × 414 (H) × 570 (D) mm (17 ½ × 16 ⅜ × 22 ½ inches)
	Mass		approx. 38 kg (83 lb 12 oz)
CRT performance	CRT type		20-inch HR Trinitron, AG Pitch: 0.25 mm, Center Resolution: 850 TV lines
	Visual screen (Viewable area, measured diagonally)		386 mm × 217mm (15 ¼ × 8 ⅝ inches) (443 mm (17 ½ inches))
	Color temperature		D65, D93, USER
	Preset brightness		100 cd/m² (30 ft-L) (when a 1 Vp-p 100 % white signal is input)
Raster and Picture performance	Normal scan		5 % over scan of effective picture area
	Under scan		3 % under scan of the effective picture area
	Stability of raster size		1% of picture height for a 10 to 90 % APL change when 100% peak white is set to 100 cd/m² (30 ft-l) brightness
	Linearity		Within 0.5 % within circle centered on the screen with a diameter equal to the vertical height, 1 % at any other point
	Convergence		Within 0.4 mm within circle centered on the screen with a diameter equal to the vertical height, 0.7 mm at any other point
Input performance	Video		BNC (3), with loop-through
		GBR	1 Vp-p ±6 dB, sync negative, high impedance
		Y	1 Vp-p ±6 dB, high impedance
		PB/PR	0.7 Vp-p ±6 dB, high impedance
	Ext sync		BNC (1), with loop-through
		Composite	0.3 to 8 Vp-p, high impedance
	Return loss		More than 40 dB (10 MHz when 75Ω terminated)
	Remote	OPTION	RS-232C Mini-din 8-pin (1)
		CONTROL UNIT	RS-422 for BKM-10R (only for HDM-20E1U/14E1U) D-sub 9-pin (1)
		REMOTE1	RS-485 serial interface, D-sub 9-pin, with loop-through
		REMOTE2	D-sub 9-pin (1)
		ISR	D-sub 9-pin (1)
RGB performance	Frequency response		60 Hz to 30 MHz $^{+1}_{-3}$ dB
	DC restoration		Back porch type Back porch level: within 1 % of peak luminance, 10 to 90 % APL

Supplied Accessories AC cable/AC plug holder/Tally label/Fuse/Operation manual

New

HDM-14E1U (NTSC)

Digital HDVS

14-inch (13-inch*) HD color monitor

•HR Trinitron assures a high resolution of 700 TV lines (16:9 mode) •SMPTE-C standard phosphors •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Built-in YP_BP_R/RGB inputs •HD SDI (High Definition Serial Digital Interface) input available as an option •Accepts signals with field frequency 59.94 or 60.00 Hz •Accepts signals with Active line 1035 & 1080 •Frequency response 30 MHz •Aspect ratio is switchable between 16:9 and 4:3 •4:3 Area Marker to find the 4:3 area inside the 16:9 picture •Serial remote control capability (mutual control with BVM-E/F/G Series) •Controlled with BKM-10R/11R

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			HDM-14E1U
General	System		1125/1080 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 274M) 1125/1035 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 240M) 525 59.94 Hz 1:1 16:9 (SMPTE 293M)
	Power requirements		100 V to 240 V AC ±10 % 50/60 Hz
	Power consumption		155 W max.
	Dimensions		346 (W) × 280 (H) × 530 (D) mm (13 5/8 × 11 1/8 × 20 7/8 inches)
	Mass		approx. 23 kg (50 lb 11 oz)
CRT performance	CRT type		14-inch HR Trinitron, AG Pitch: 0.22 mm, Center Resolution: 700 TV lines
	Visual screen (Viewable area, measured diagonally)		266 mm x 150 mm (10 1/2 × 6 inches) (305 mm (12 1/8 inches))
	Color temperature		D65, D93, USER
	Preset brightness		100 cd/m^2 (30 ft-L) (when a 1 Vp-p 100 % white signal is input)
Raster and Picture performance	Normal scan		5 % over scan of effective picture area
	Under scan		3 % under scan of the effective picture area
	Stability of raster size		1% of picture height for a 10 to 90 % APL change when 100% peak white is set to 100 cd/m^2 (30 ft-l) brightness
	Linearity		Within 0.5 % within circle centered on the screen with a diameter equal to the vertical height, 1 % at any other point
	Convergence		Within 0.3 mm within circle centered on the screen with a diameter equal to the vertical height, 0.6 mm at any other point
Input performance	Video		BNC (3), with loop-through
		GBR	1 Vp-p ±6 dB, sync negative, high impedance
		Y	1 Vp-p ±6 dB, high impedance
		PB/PR	0.7 Vp-p ±6 dB, high impedance
	Ext sync		BNC (1), with loop-through
		Composite	0.3 to 8 Vp-p, high impedance
	Return loss		More than 40 dB (10 MHz when 75Ω terminated)
	Remote	OPTION	RS-232C Mini-din 8-pin (1)
		CONTROL UNIT	RS-422 for BKM-10R (only for HDM-20E1U/14E1U) D-sub 9-pin (1)
		REMOTE1	RS-485 serial interface, D-sub 9-pin, with loop-through
		REMOTE2	D-sub 9-pin (1)
		ISR	D-sub 9-pin (1)
RGB performance	Frequency response		60 Hz to 30 MHz $^{+1}_{-3}$ dB
	DC restoration		Back porch type Back porch level: within 1 % of peak luminance, 10 to 90 % APL

Supplied Accessories AC cable/AC plug holder/Tally label/Fuse/Operation manual

New

HDM-14E5U (NTSC)

Digital HDVS

14-inch (13-inch*) HD color monitor

•HR Trinitron assures a high resolution of 700 TV lines (16:9 mode) •SMPTE-C standard phosphors •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Built-in YP_BP_R/RGB inputs •HD SDI (High Definition Serial Digital Interface) input available as an option •Accepts signals with field frequency 59.94 or 60.00 Hz •Accepts signals with Active line 1035 & 1080 •Frequency response 30 MHz •Aspect ratio is switchable between 16:9 and 4:3 •4:3 Area Marker to find the 4:3 area inside the 16:9 picture •Serial remote control capability (mutual control with BVM-E/F/G Series) •Controlled with BKM-10R/11R

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			HDM-14E5U
General	System		1125/1080 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 274M) 1125/1035 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 240M) 525 59.94 Hz 1:1 16:9 (SMPTE 293M)
	Power requirements		100 V to 240 V AC ±10 % 50/60 Hz
	Power consumption		170 W max.
	Dimensions		482 (W) × 280 (H) × 530 (D) mm (19 × 11 1/8 × 20 7/8 inches)
	Mass		approx. 26 kg (57 lb)
CRT performance	CRT type		14-inch HR Trinitron, AG Pitch: 0.22 mm, Center Resolution: 700 TV lines
	Visual screen (Viewable area, measured diagonally)		266 mm × 150 mm (10 1/2 × 6 inches) (305 mm (12 1/8 inches))
	Color temperature		D65, D93, USER
	Preset brightness		100 cd/m² (30 ft-L) (when a 1 Vp-p 100 % white signal is input)
Raster and Picture performance	Normal scan		5 % over scan of effective picture area
	Under scan		3 % under scan of the effective picture area
	Stability of raster size		1% of picture height for a 10 to 90 % APL change when 100% peak white is set to 100 cd/m² (30 ft-l) brightness
	Linearity		Within 0.5 % within circle centered on the screen with a diameter equal to the vertical height, 1 % at any other point
	Convergence		Within 0.3 mm within circle centered on the screen with a diameter equal to the vertical height, 0.6 mm at any other point
Input performance	Video		BNC (3), with loop-through
		GBR	1 Vp-p ±6 dB, sync negative, high impedance
		Y	1 Vp-p ±6 dB, high impedance
		PB/PR	0.7 Vp-p ±6 dB, high impedance
	Ext sync		BNC (1), with loop-through
		Composite	0.3 to 8 Vp-p, high impedance
	Return loss		More than 40 dB (10 MHz when 75Ω terminated)
	Remote	OPTION	RS-232C Mini-din 8-pin (1)
		CONTROL UNIT	RS-422 for BKM-10R (only for HDM-20E1U/14E1U) D-sub 9-pin (1)
		REMOTE1	RS-485 serial interface, D-sub 9-pin, with loop-through
		REMOTE2	D-sub 9-pin (1)
		ISR	D-sub 9-pin (1)
RGB performance	Frequency response		60 Hz to 30 MHz $^{+1}_{-3}$ dB
	DC restoration		Back porch type Back porch level: within 1 % of peak luminance, 10 to 90 % APL

Supplied Accessories AC cable/AC plug holder/Tally label/Fuse/Operation manual

New

PHM-20M8U (NTSC)

Digital HDVS

20-inch (19-inch*) HD color monitor

•HR Trinitron assures a high resolution of 700 TV lines (16:9 mode) •SMPTE-C standard phosphors •Accepts analog YP_BP_R/RGB signals •HD/VD separately synchronizing capability •HD SDI (High Definition Serial Digital Interface) input available as an option •Aspect ratio is switchable between 16:9 and 4:3 •Accepts signals with field frequency 59.94 or 60.00 Hz •Accepts signals with Active line 1035 & 1080 •Frequency response 24 MHz •Stabilized color temperature obtained with a beam current feedback circuit •Color temperature D65, D93 or user preset (3200K to 10000K) selectable •Underscan, Blue Only, and H/V delay mode available •4:3 Area Marker to find the 4:3 area inside the 16:9 picture •Auto/Manual degaussing and Degauss-Delay function •Serial and Parallel remote control capability •Mountable into a 19-inch EIA standard rack with the optional SLR-103A

* viewable area, measured diagonally

Specifications

			HDM-20M8U
General	System		1125/1080 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 274M) 1125/1035 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 240M) 525 59.94 Hz 1:1 16:9 (SMPTE 293M) 525 59.94 Hz 1:1 4:3 (DXC-9000 VGA mode)
	Power requirements		AC 100 V to 120 V, 220 V to 240 V ±10 % 50/60 Hz
	Power consumption ( ): with HD SDI interface		150 W (164 W)
	Dimensions ( ): D without 16:9 mask		450(W) × 458(H) × 557(550)(D) mm 17 ¾ × 18 ⅛ × 22(21 ¾) inches
	Mass		approx. 34 kg (74 lb 15 oz)
CRT performance	CRT type		20-inch HR Trinitron, AG Pitch: 0.30 mm, Center Rasolution: 700 TV lines (4:3 mode: 900 TV lines)
	Visual screen size	16:9 mode	388 × 218 mm (15 ⅜ × 8 ⅝ inches) (445 mm (17 ⅝ inches))
	(viewable area, measured diagonally)	4:3 mode	388 × 292 mm (15 ⅜ × 11 ½ inches) (484 mm (19 ⅛ inches))
	Color temperature		D65/D93/USER1/USER2
Raster and Picture performance	Normal scan		7 % overscan
	Under scan		5 % underscan
	Linearity	H	Less than 5 %
		V	Less than 5 %
	Convergence		Within 0.5 mm within circle centered on the screen with a diameter equal to the vertical height, 0.6 mm at any other point
	Stability of raster size	H	Less than 1 %
		V	Less than 1 %
	High voltage regulation		Less than 1.0 %
	Phosphor		SMPTE-C
Input	INPUT A/B	YP_BP_R/GBR IN	BNC (6) YP_BP_R: 0.7 Vp-p GBR: 0.7 Vp-p Sync on G/Y: Tri-level sync: 0.6 Vp-p Bi-level sync: 0.3 Vp-p Automatic 75 Ω termination
		Ext sync IN	BNC (2) Bi-level sync: 4.0 Vp-p ±6 dB, negative Tri-level sync: 0.6 Vp-p Automatic 75 Ω termination
		HD/VD IN	BNC (HD × 2/VD × 2) 4.0 Vp-p ±6 dB, negative or positive (HD and VD must be the same pole) Automatic 75 Ω termination
		AUDIO IN	RCA Pin (MONO ×2) –5 dBu 47 kΩ
	OUTPUT A	YP_BP_R/GBR OUT	BNC (3), loop-through
		Ext sync OUT	BNC (1), loop-through
		HD/VD IN	BNC (2) (HD × 1/VD × 1), loop-through
		AUDIO OUT	RCA Pin (MONO) (1), loop-through
	REMOTE		20-pin (1) (Parallel), D-sub 9-pin (2) (attachment for serial remote)

Supplied accessories: 16:9 mask with covers/AC cable/AC plug holder/Tally label/20-pin connector cable/Operation manual
Serial remote connector

New

PHM-14M8U (NTSC)

Digital HDVS

14-inch (13-inch*) HD color monitor

•HR Trinitron assures a high resolution of 600 TV lines (16:9 mode) •SMPTE-C standard phosphors •Accepts analog YP_BP_R/RGB signals •HD/VD separately synchronizing capability •HD SDI (High Definition Serial Digital Interface) input available as an option •Aspect ratio is switchable between 16:9 and 4:3 •Accepts signals with field frequency 59.94 or 60.00 Hz •Accepts signals with Active line 1035 & 1080 •Frequency response 24 MHz •Stabilized color temperature obtained with a beam current feedback circuit •Color temperature D65, D93 or user preset (3200K to 10000K) selectable •Underscan, Blue Only, and H/V delay mode available •4:3 Area Marker to find the 4:3 area inside the 16:9 picture •Auto/Manual degaussing and Degauss-Delay function •Serial and Parallel remote control capability •Mountable into a 19-inch EIA standard rack with the optional MB-502B and SLR-102

* viewable area, measured diagonally

Specifications

			HDM-14M8U
General	System		1125/1080 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 274M) 1125/1035 60 Hz, 59.94 Hz 2:1 16:9 (SMPTE 240M) 525 59.94 Hz 1:1 16:9 (SMPTE 293M) 525 59.94 Hz 1:1 4:3 (DXC-9000 VGA mode)
	Power requirements		AC 100 V to 120 V, 220 V to 240 V ±10 % 50/60 Hz
	Power consumption ( ): with HD SDI interface		124 W (164 W)
	Dimensions ( ): D without 16:9 mask		346(W) × 340(H) × 467(460)(D) mm 13 5/8 × 13 1/2 × 18 1/2 (18 1/8) inches
	Mass		approx. 19 kg (41 lb 14 oz)
CRT performance	CRT type		14-inch HR Trinitron, AG Pitch: 0.25 mm, Center Rasolution: 700 TV lines (4:3 mode: 900 TV lines)
	Visual screen size	16:9 mode	267× 151 mm (10 5/8 × 6 inches) (307 mm (12 1/8 inches))
	(viewable area, measured diagonally)	4:3 mode	267 × 200 mm (10 5/8 × 7 7/8 inches) (331 mm (13 1/8 inches))
	Color temperature		D65/D93/USER1/USER2
Raster and Picture performance	Normal scan		7 % overscan
	Under scan		5 % underscan
	Linearity	H	Less than 5 %
		V	Less than 5 %
	Convergence		Within 0.4 mm within circle centered on the screen with a diameter equal to the vertical height, 0.5 mm at any other point
	Stability of raster size	H	Less than 1 %
		V	Less than 1 %
	High voltage regulation		Less than 1.0 %
	Phosphor		SMPTE-C
Input	INPUT A/B	YP_BP_R/GBR IN	BNC (6) YP_BP_R: 0.7 Vp-p GBR: 0.7 Vp-p Sync on G/Y: Tri-level sync: 0.6 Vp-p Bi-level sync: 0.3 Vp-p Automatic 75 Ω termination
		Ext sync IN	BNC (2) Bi-level sync: 4.0 Vp-p ±6 dB, negative Tri-level sync: 0.6 Vp-p Automatic 75 Ω termination
		HD/VD IN	BNC (HD × 2/VD × 2) 4.0 Vp-p ±6 dB, negative or positive (HD and VD must be the same pole) Automatic 75 Ω termination
		AUDIO IN	RCA Pin (MONO × 2) –5 dBu 47 kΩ
	OUTPUT A	YP_BP_R/GBR OUT	BNC (3), loop-through
		Ext sync OUT	BNC (1), loop-through
		HD/VD IN	BNC (2) (HD × 1/VD × 1), loop-through
		AUDIO OUT	RCA Pin (MONO) (1), loop-through
	REMOTE		20-pin (1) (Parallel), D-sub 9-pin (2) (attachment for serial remote)

Supplied accessories: 16:9 mask with covers/AC cable/AC plug holder/Tally label/20-pin connector cable/Operation manual
Serial remote connector

BVM-20E1U (NTSC) /20E1E/A (PAL)

20-inch (19-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of more than 1000 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 4 open slots) •Number of inputs expandable with optional input expansion boards:

- •24 composite inputs or
- •12 SDI or
- •9 component or
- •8 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-20E1U	BVM-20E1E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 200W	
	Dimensions		444(W) × 414(H) × 570(D)mm ($17^{1}/_{2} \times 16^{3}/_{8} \times 22^{1}/_{2}$ inches)	
	Mass		37 kg (81 lb 9 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.25mm, Center resolution: 1000 TV lines	
	Screen size		Diagonal: 48.2cm (19 inches), Width: 38.6cm ($15^{1}/_{4}$ inches), Height: 29.1cm ($11^{1}/_{2}$ inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m² (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m² (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.4mm within circle centered on screen and with a diameter equal to vertical height, 0.7mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz ±1dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-20F1U (NTSC) /20F1E/A (PAL)

20-inch (19-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of 900 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 4 open slots) •Number of inputs expandable with optional input expansion boards:

- •24 composite inputs or
- •12 serial digital or
- •9 component or
- •8 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability • Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-20F1U	BVM-20F1E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 200W	
	Dimensions		444(W) × 414(H) × 570(D)mm (17 1/2 × 16 3/8 × 22 1/2 inches)	
	Mass		37 kg (81 lb 9 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.3mm, Center resolution: 900 TV lines	
	Screen size		Diagonal: 482mm (19 inches), Width: 386mm (15 1/4 inches), Height: 291mm (11 1/2 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m^2 (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m^2 (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.4 mm within circle centered on screen and with a diameter equal to vertical height, 0.7 mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz –1dB/–3dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

New

BVM-20G1U (NTSC) /20G1E/20G1A (PAL)

20-inch (19-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of 800 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 1 open slot) •Number of inputs expandable with optional input expansion boards:

- •6 composite inputs or
- •3 SDI or
- •3 component or
- •2 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-20G1U	BVM-20G1E/20G1A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 140W	
	Dimensions		444(W) × 414(H) × 570(D)mm (17 1/2 × 16 3/8 × 22 1/2 inches)	
	Mass		37 kg (81 lb 9 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.3mm, Center resolution: 800 TV lines	
	Screen size		Diagonal: 482 mm (19 inches), Width: 386 mm (15 1/4 inches), Height: 291 mm (11 1/2 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m^2 (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m^2 (30fL) brightness	
	Linearity of center H & V lines		Less than 1% of the picture height	
	Geometry (all over screen)		2% of the picture height	
	Convergence		0.5mm within circle centered on screen and with a diameter equal to vertical height, 0.9mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (6MHz when 75Ω terminated)	
RGB performance	Frequency response		50Hz to 7MHz +1 −3 dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-14E1U (NTSC) /14E1E/A (PAL)

14-inch (13-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of 900 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 2 open slots) •Number of inputs expandable with optional input expansion boards:

- •12 composite or
- •6 SDI or
- •5 component or
- •4 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14E1U	BVM-14E1E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 145W	
	Dimensions		346(W) × 280(H) × 530(D)mm (13 5/8 × 11 1/8 × 20 7/8 inches)	
	Mass		23 kg (50 lb 11 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.22mm, Center resolution: 900 TV lines	
	Screen size		Diagonal: 33.2cm (13 1/8 inches), Width: 26.8cm (10 5/8 inches), Height: 20.1cm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m^2 (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m^2 (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.3mm within circle centered on screen and with a diameter equal to vertical height, 0.6mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz ±1dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-14E5U (NTSC) /14E5E/A (PAL)

14-inch (13-inch*) color monitor

•HR Trinitron assures a high resolution of 900 TV lines •SMPTE-C and EBU standard phosphors • Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 4 open slots) •Number of inputs expandable with optional input expansion boards:

- •24 composite inputs or
- •12 SDI or
- •9 component or
- •8 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14E5U	BVM-14E5E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 175W	
	Dimensions		482(W) × 280(H) × 530(D)mm (19 × 11 1/8 × 20 7/8 inches)	
	Mass		26kg (57 lb)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.22mm, Center resolution: 900 TV lines	
	Screen size		Diagonal: 33.2cm (13 1/8 inches), Width: 26.8cm (10 5/8 inches), Height: 20.1cm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m^2 (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m^2 (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.3mm within circle centered on screen and with a diameter equal to vertical height, 0.6mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz ±1dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-14F1U (NTSC) /14F1E/A (PAL)

14-inch (13-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of 800 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 2 open slots) •Number of inputs expandable with optional input expansion boards:

- •12 composite inputs or
- •6 SDI or
- •5 component or
- •4 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14F1U	BVM-14F1E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 145W	
	Dimensions		346(W) × 280(H) × 530(D)mm (13 5/8 × 11 1/8 × 20 7/8 inches)	
	Mass		23kg (50 lb 11 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.25mm, Center resolution: 800 TV lines	
	Screen size		Diagonal: 33.2cm (13 1/8 inches), Width: 26.8cm (10 5/8 inches), Height: 20.1cm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m² (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m² (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.3mm within circle centered on screen and with a diameter equal to vertical height, 0.6mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz ±1dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-14F5U (NTSC) /14F5E/A (PAL)

14-inch (13-inch*) color monitor

•HR Trinitron assures a high resolution of 800 TV lines •SMPTE-C and EBU standard phosphors • Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 4 open slots) •Number of inputs expandable with optional input expansion boards:

- •24 composite inputs or
- •12 SDI or
- •9 component or
- •8 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14F5U	BVM-14F5E/A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 175W	
	Dimensions		482(W) × 280(H) × 530(D)mm (19 × 11 1/8 × 20 7/8 inches)	
	Mass		26kg (57 lb)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.25mm, Center resolution: 800 TV lines	
	Screen size		Diagonal: 33.2cm (13 1/8 inches), Width: 26.8cm (10 5/8 inches), Height: 20.1cm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m^2 (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m^2 (30fL) brightness	
	Linearity of center H & V lines		0.5% of the picture height	
	Geometry (all over screen)		1% of the picture height	
	Convergence		0.3mm within circle centered on screen and with a diameter equal to vertical height, 0.6mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (7MHz when 75Ω terminated)	
RGB performance	Frequency response		100Hz to 10MHz ±1dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

New

BVM-14G1U (NTSC) /14G1E/14G1A (PAL)

14-inch (13-inch*) color monitor

•Divided type with separate display and control unit •HR Trinitron assures a high resolution of 800 TV lines •SMPTE-C and EBU standard phosphors •Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 1 open slot) •Number of inputs expandable with optional input expansion boards:

- •6 composite inputs or
- •3 SDI or
- •3 component or
- •2 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14G1U	BVM-14G1E/14G1A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 120W	
	Dimensions		346(W) × 280(H) × 530(D)mm (13 5/8 × 11 1/8 × 20 7/8 inches)	
	Mass		22kg (48 lb 8 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.25mm, Center resolution: 800 TV lines	
	Screen size		Diagonal: 332mm (13 1/8 inches), Width: 268mm (10 5/8 inches), Height: 201mm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m² (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m² (30fL) brightness	
	Linearity of center H & V lines		Less than 1% of the picture height	
	Geometry (all over screen)		2% of the picture height	
	Convergence		0.4mm within circle centered on screen and with a diameter equal to vertical height, 0.8mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (6MHz when 75Ω terminated)	
RGB performance	Frequency response		50Hz to 7MHz +1 −3 dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

New

BVM-14G5U (NTSC) /14G5E/14G5A (PAL)

14-inch (13-inch*) color monitor

•HR Trinitron assures a high resolution of 800 TV lines •SMPTE-C and EBU standard phosphors • Built-in auto set-up system for chroma, phase, and white balance •Precise color temperature adjustment is possible with a color analyzer via RS-232C interface •Stabilized color temperature obtained with a beam current feedback circuit •Component (Y/R-Y/B-Y)/RGB input facility available •Accepts various signals by inserting optional input boards directly into the rear panel (equipped with 1 open slot) •Number of inputs expandable with optional input expansion boards:

- •6 composite inputs or
- •3 SDI or
- •3 component or
- •2 Y/C inputs

(Types and numbers of inputs depend on option boards used.)

•Aspect ratio is switchable between 4:3 and 16:9, 16:9 bezel is available as an option •Serial or parallel remote control capability •Memory card BKM-12Y available as an option for easy monitor set-up •Supported by the Sony Interactive Status Reporting (ISR) system

See Optional Accessories on page 202.

* viewable area, measured diagonally

Specifications

			BVM-14G5U	BVM-14G5E/14G5A
General	System		525 lines 60 fields NTSC	625 lines 50 fields PAL
	Power requirements		AC 100 to 240V ±10%	
	Power consumption		Max. 120W	
	Dimensions		482(W) × 280(H) × 530(D)mm (19 × 11 1/8 × 20 7/8 inches)	
	Mass		24kg (52 lb 14 oz)	
CRT performance	CRT type		HR Trinitron, AG pitch: 0.25mm, Center resolution: 800 TV lines	
	Screen size		Diagonal: 332mm (13 1/8 inches), Width: 268mm (10 5/8 inches), Height: 201mm (8 inches)	
	Color temperature		PRESET: Factory adjusted for 6500K white, MANUAL control is also available, which allows alternative setting of color temperature	
	Preset brightness		100 cd/m² (30ft-L) (When a 1 Vp-p 100% white signal is input)	
Raster and Picture performance	Normal scan		4: 3 aspect ratio, Blanked raster<+5%, Raster size has internal adjustment	
	Under scan		4: 3 aspect ratio, Approx. –3%, Picture and blanking boundaries displayed	
	Stability of raster size		1% of picture height for a 10 to 90% APL change when 100% peak level white set to 100cd/m² (30fL) brightness	
	Linearity of center H & V lines		Less than 1% of the picture height	
	Geometry (all over screen)		2% of the picture height	
	Convergence		0.4mm within circle centered on screen and with a diameter equal to vertical height, 0.8mm at any other point	
Input performance	RGB	R/B	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
		G	Loop-through BNC, 1.0Vp-p ±6dB, sync negative, high impedance	
	Component	Y	Loop-through BNC, 1.0Vp-p ±6dB, high impedance	
		R-Y/B-Y	Loop-through BNC, 0.7Vp-p ±6dB, high impedance	
	EXT SYNC		Loop-through BNC, 0.3 to 8Vp-p negative, high impedance	
	Return loss		More than 46dB (6MHz when 75Ω terminated)	
RGB performance	Frequency response		50Hz to 7MHz +1 −3 dB	
	DC restoration		Back porch type, Back porch level: within 1% of peak luminance, 10% to 90% APL	

BVM-14M4DE (PAL)

14-inch colour monitor

•HR Trinitron assures a high resolution of 800 TV lines •EBU standard phosphors •Auto chroma/phase set-up •Stabalized colour temperature obtained with a beam current feedback circuit •270Mb/s component serial digital interface (video) terminal as standard •Component (Y/R-Y/B-Y or RGB), Y/C and composite video inputs •Aspect ratio is switchable between 4:3 and 16:9 •On-screen menu in five languages for set-up and adjustment •RS-422 serial remote control capability with optional interface board BKM-103 •Remote/tally input •Colour temperature D65/D93/User preset (3200K to10000K) •Mountable into a 19-inch EIA standard rack with the optional MB-502B and SLR-102

See Optional Accessories on page 203.

Specifications

			BVM-14M4DE
General	System		PAL/NTSC/SECAM/NTSC4.43 automatically selected
	Power requirements		AC 100 to 240V, 50/60Hz
	Power consumption		Max. 99W
	Dimensions		346(W) × 340(H) × 431(D)mm (13 5/8 × 13 1/2 × 17 inches)
	Mass		17.7 kg (39 lb)
CRT performance	CRT type		14-inch HR Trinitoron CRT with EBU phosphor, 90°deflection, AG pitch: 0.25mm, Center resolution: 800TV lines
	Color temperature		D65/D93/User preset (3200K to 10000K) (Factory preset 6500K)
Raster and Picture performance	Normal scan		4 : 3 aspect ratio, blanked raster<7%, raster size has internal adjustment
	Under scan		4 : 3 aspect ratio, approx. –5%, picture blanking boundaries displayed
	Stability of raster size		H: 1.0% V: 1.5%
	Linearity of centre H&V lines		H: Less than 4%, V: Less than 4%
	Convergence		0.4mm within circle centered on the screen with a diameter equal to vertical height, 0.5mm at any other point
Input performance	Video		Loop-through BNC 1Vp-p ±6dB, sync negative 75Ω termination*1
	Y/C		Loop-through Mini DIN 4-pin Y: 1Vp-p ±6dB, sync negative, C (NTSC): 0.286Vp-p ±6dB, C (PAL): 0.3Vp-p ±6dB, Automatic 75Ω termination*1
	Analog component (RGB/Y/R-Y/B-Y)	G/Y:	BNC 0.7Vp-p non-composite or 1Vp-p ±6dB composite, sync negative, Automatic 75Ω termination*1
		R/B/R-Y/B-Y:	BNC, 0.7Vp-p ±6dB non-composite, 75Ω
	Component serial digital		Active through BNC 270Mb/s, 10-bit sample
	EXT SYNC		Loop-through BNC 4.0Vp-p ±6dB, negative, Automatic 75Ω termination*1
	Frequency response		RGB: 10MHz ±3dB, Component: 10MHz ±3dB (Y signal), Composite: 10MHz ±3dB (Y signal), Y/C: 10MHz ±3dB (Y signal)
	Aperature correction		Adjustable continuously up to 6dB boost at 4.5MHz
	Speaker out		0.8W, monaural
SDI performance	Digital video	Quantization	10 bit/sample
		Signal system	525/60 or 625/50, automatic selection
		Sampling frequency	Y: 13.5MHz, R-Y/B-Y:6.75MHz
		Bit rate	270Mb/s
		Video bandwidth	Y: 100Hz to 5.75MHz –3dB to 1dB (at low passfilter out) R-Y/B-Y: 100Hz to 2.75MHz –3dB to 1dB

*1 75Ω termination is automatically set to OFF when a connection is made to the OUT connector. 0dBu = 0.775r.m.s.

New

BVM-8045QD (NTSC)/9045D (PAL)

8-inch (9-inch) Color Monitor

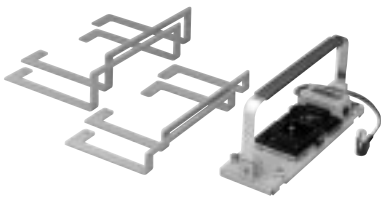
•Component serial digital interface terminal as standard •Aspect ratio is selectable between 16:9 and 4:3 by the button on the front panel •HR Trinitron CRT provides 450TV lines at center •Stable color temperature from a beam current feedback circuit •Component (Y/R-Y/ B-Y or analog RGB), LINE A (composite video or Y/C), LINE B (composite video) inputs •NTSC comb filter •Accepts external sync and sync on Green •Tally input •Color tempernture D65 •Blue only, H/V delay, Underscan capability •AC/DC (XLR-4pin) operation capability •Front panel degauss button •19-inch EIA standard rack mountable with a second BVM-8045QD/9045D or an optional blank panel MB-509 by using the optional MB-507 rack mounting bracket •Wired remote control capability

Supplied accessories: AC power cord
Mini DIN 8-pin connector (350mm, 13 7/8 inches)
Tally number plates
Operation manual

See Optional Accessories on page 203.

Battery Adaptor
DC-L10

•Attaches a rechargeable Lithiun-Ion Battery Pack BP-L60A or BP-L90A to a PVM-8045QD/9045D with this adaptor. •Retractable handle •Easily detachable upper part of adaptor bracket



Specifications

			BVM-8045QD	BVM-9045D
General	System		NTSC/PAL/SECAM/NTSC4.43 automatically selected	
	Power requirements		AC 100 to 240V, 50/60Hz DC 12V (XLR 4-pin)	
	Power consumption		AC: 48W, DC: 44W	AC: 45W, DC: 42W
	Dimensions		217(W) × 217(H) × 352.5(D)mm (8 5/8 × 8 5/8 × 14 inches)	
	Mass		8.5 kg (18 lb 1 oz)	
CRT performance	CRT type		9-inch HR Trinitoron CRT,70°deflection, AG pitch: 0.25mm, Center resolution: 450TV lines	
	Color temperature		D65	
Raster and Picture performance	Normal scan		4 × 3 aspect ratio, Blanked raster<6%, Raster size has internal adjustment	
	Under scan		4 × 3 aspect ratio, Approx. –3%, Picture blanking boundaries displayed	
	Stability of raster size		H: 1% V: 1.5%	
	Linearity		Less than 2% of the picture height	
	Convergence		0.43mm within circle centered on the screen and with a diameter equal to vertical height, 0.53mm at any other point	
Input performance	Video		Loop-through BNC ±6dB composite, sync negative 75Ω termination*1	
	Y/C		Loop-through Mini DIN 4-pin Y: 1Vp-p ±6dB, sync negative C (PAL): 0.3Vp-p ±6dB , C (NTSC): 0.286Vp-p ±6dB, Automatic 75Ω termination*1	
	Component	Y:	Loop-through BNC 1Vp-p ±6dB sync negative, 75Ω	
		R-Y, B-Y:	Loop-through BNC 0.7Vp-p ±6dB positive, 75Ω	
	Analog RGB	G:	Loop-through BNC 1Vp-p ±6dB sync on green, 75Ω	
		R, B:	Loop-through BNC 0.7Vp-p ±6dB positive, 75Ω	
	Component serial digital		Active through BNC 270Mb/S, 10-bit sample	
	EXT SYNC		Loop-through BNC 4Vp-p ±6dB negative, Automatic 75Ω termination*1	
	Remote Input		8-pin mini DIN connector	
	Frequency response		RGB: 6MHz –3dB, Component: 6MHz –3dB (Y signal), Composite: 6MHz –3dB (Y signal), Y/C: 6MHz-3dB (Y signal)	
	Aperature correction		Adjustable continuously up to 6dB boost at 3.0MHz	
SDI performance	Digital video	Quantization	10-bit sample	
		Signal system	525/60 or 625/50, automatic selection	
		Sampling frequency	Y: 13.5MHz, R-Y/B-Y:6.75MHz	
		Bit rate	CCIR Recommendation 656-lll, 270Mb/s	
		Video bandwidth	Y: 100Hz to 5.75MHz –3dB to 1dB R-Y/B-Y: 100Hz to 2.75MHz –3dB to 1dB (at low passfilter out)	

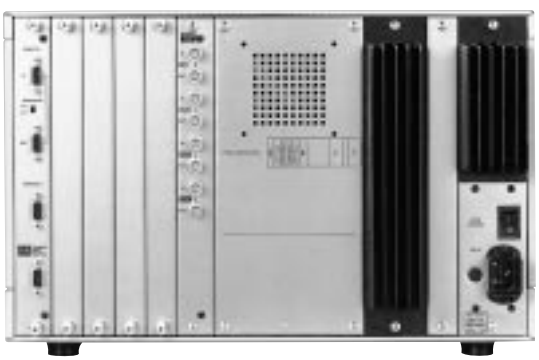
*1 75Ω termination is automatically set to OFF when connection is made to the OUT connector.

Optional Accessories for HDM/BVM Monitors

	HDM-20E1U	HDM-14E1U	HDM-14E5U	BVM-20E1U/ 20E1E/A	BVM-20F1U/ 20F1E/A	BVM-20G1U/ 20G1E/20G1A	BVM-14E1U/ 14E1E/A	BVM-14E5U/ 14E5E/A	BVM-14F1U/ 14F1E/A	BVM-14F5U/ 14F5E/A	BVM-14G1U/ 14G1E/14G1A	BVM-14G5U/ 14G5E/14G5A
BKM-20D*1 Serial Digital Interface 4:2:2 Decoder Adaptor (3 digital active loop-through/3 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-21D*1 Serial Digital Interface Multi Decoder Adaptor (3 digital active loop-through/3 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-24N*1 NTSC Decoder Adaptor (6 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-25P*1 PAL Decoder Adaptor (6 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-26M*1 PAL-M Decoder Adaptor (6 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-27T*1 Tri-standard decoder Adaptor (6 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-22X Serial digital Interface Expansion Adaptor (NTSC/PAL/SECAM) (3 digital active loop-through/3 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	N.A.	0	0	0	0	N.A.	N.A.
BKM-28X Analog Video Input Expansion Adaptor (6 analog composite loop-through inputs)	N.A.	N.A.	N.A.	0	0	0	0	0	0	0	0	0
BKM-41HD HD SDI Input Adaptor (1 digital with monitor out/1 analog component loop-through inputs)	0	0	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BKM-42HD HD SDI Input Adaptor (2 digital with monitor out/1 analog component loop-through inputs)	0	0	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BKM-48X HD analog Input Expansion Adaptor (6 analog composite loop-through inputs)	0	0	0	0	0	0	0	0	0	0	0	0
BKM-10R Control Unit	0	0	0	0	0	0	0	N.A.	0	N.A.	0	N.A.
BKM-11R Control Unit	0	0	0	0	0	0	0	0	0	0	0	0
BKM-12Y*2 Memory Card	0	0	0	0*2	0*2	0*2	0*2	0	0*2	0	0*2	0
BKM-14L Auto Set-up Proce	0	0	0	0	0	0	0	0	0	0	0	0
BKM-32H Control Unit BKM-10R Attachment Kit	0	0	0	0	0	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BKM-33H20 16:9 Mask	N.A.	N.A.	N.A.	0	0	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BKM-33H14 16:9 Mask	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0	0	0	0	0	0
BKM-30E20*3 19-inch rack Mount kit	0	N.A.	N.A.	0	0	0	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
BKM-31E14 19-inch rack Mount kit	N.A.	0	N.A.	N.A.	N.A.	N.A.	0	N.A.	0	N.A.	0	N.A.
BKM-30E14 19-inch rack Mount kit	N.A.	N.A.	0	N.A.	N.A.	N.A.	N.A.	0	N.A.	0	N.A.	0
MB-510 19-inch rack Mount kit	0	0	N.A.	0	0	0	0	N.A.	0	N.A.	0	N.A.
RCC-5G/10G/30G Control cable for RS-485/422 Serial Remote Control (9-pin)	0	0	0	0	0	0	0	0	0	0	0	0

*1 Each decoder adapter can also function as an expansion adaptor.
*2 Utilized with BKM-10R/11R
*3 BKM-30E20 can also be used with BKM-32H
0=Option
N.A.=Not Applicable

BKM-10R



Rear panel of BVM-14E5U/14E5E

Optional Accessories for BVM-14M4DE

		BVM-14M4DE
BKM-102	Component serial digital interface kit (audio)	○
BKM-103	RS-422 serial remote control kit	○
MB-502B	Rack mounting bracket	○
SLR-102	Slide rail kit (use together with MB-502B)	○
TU-1040E	Tuner unit (for B/G/H, L, D/K systems)	○

○: Optional N.A.: Not applicable

Optional Accessories for BVM-8045QD/9045D

		BVM-8045QD BVM-9045D
MB-507	19-inch EIA standard rack mounting bracket	○
MB-509	Blank panel	○
DCC-XLR4	Car battery cord	○
DC-L10	Battery adaptor	○

14

Routing Equipment

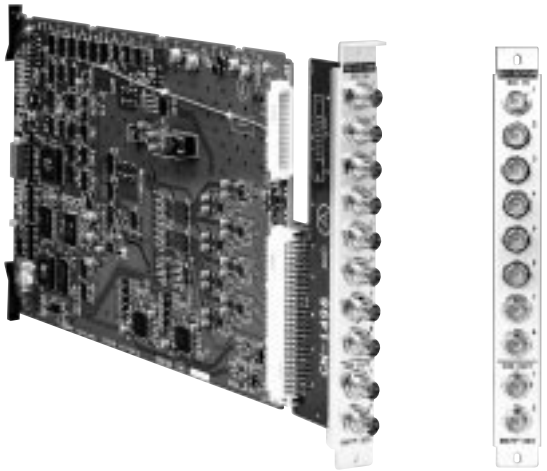
BKPF-300 206
BKPF-301 206
BKPF-350 207
BKPF-351 207
BKPF-R70 208
BKS-R1210 208
BKS-R1607 209
BKS-R1608 209
BKS-R3205 210
BKS-R3206 210
BKS-R3209 211
BKS-R3210 211
BKS-R3280/R3281 212
BKS-R5001 212
BVS-A1201 213
BVS-A3232 214
BVS-V1201 215
BVS-V3232 216
BZR-1000 217
DVS-A1201 217
DVS-A3232 218
DVS-RS1616 218
DVS-TC3232 219
DVS-V1201 219
DVS-V1616 220
DVS-V3232B 220
DVS-V6464B 221

BKPF-300

Digital Video 8x2 Selector Board

•A digital video selector board with eight inputs and two outputs •Plug-in type to PFV-D10/D50A/D300/HD50A/HD300 interface unit •Remote control network with S-BUS •Flexible matrix size with cascade connection—up to14 BKPF-300s are able to be integrated into a PFV-D300/HD300 interface unit to from a digital routing system of up to 112 × 2 •Status monitoring •Back-up of cross point information for 24 hours guaranteed

Supplied accessories:	Operation manual (1) Installation manual (1) Slot number label (1 set) Cascade cable (1)
Optional accessories:	Interface unit (Chassis) PFV-D300 Remote control BKS-R3205/R3206/R1607/R1608/R3209/R3210 Status display BKS-R3280/R3281



Specifications

General

Power consumption:	DC +5V, 0.5A DC -5V, 1.0A 7.5W
Dimensions:	
Main board	195(H) × 310(D)mm (7 ¾ × 12 ¼ inches)
Connector board	195(H) × 75(D) × 25(W)mm (7 ¾ × 3 × 1 inches)
Mass:	
Main board	Approx.550g (1lb. 3oz)
Connector board	Approx.200g (7oz)
Operating temperature	+5°C to +40°C (41°F to 104°F)

Input/Output connector and signal

Input video signal:	BNC × 8, 0.8Vp-p, 75Ω
Output video signal:	BNC × 2, 0.8Vp-p, 75Ω
Input return loss:	15dB or more
Transmission distance:	Max.200m (656ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

Output

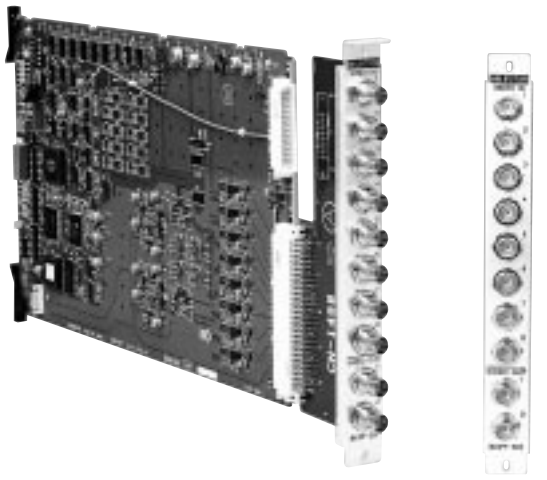
Amplitude:	0.8Vp-p ±10%, 75Ω
Jitter:	500ps or less
Over/Under shoot:	10% or less
Rise/Fall time:	1.5ÜT or less
Return loss:	15dB or more

BKPF-301

Analog Video 8x2 Selector Board

•An analog video selector board with eight inputs and two outputs •Plug-in type to PFV-D10/D50A/D300/HD50A/HD300 interface unit •Remote control network with S-BUS • Flexible matrix size with cascade connection—up to four BKPF-301s can be integrated into a PFV-D50A/D300/HD50A/HD300 interface unit to configure an analog routing system of up to 32 × 2 •Status monitoring •Back-up of cross point information for 24 hours guaranteed

Supplied accessories	Operation manual (1) Installation manual (1) Slot number label (1 set) Cascade cable (1)
Optional accessories:	Interface unit (Chassis) PFV-D300 Remote control BKS-R3205/R3206/R1607/R1608/R3209/R3210 Status display BKS-R3280/R3281



Specifications

General

Power consumption:	DC +5V, 0.5A DC -5V, 0.2A 3.5W
Dimensions:	
Main board	195(H) × 310(D)mm (7 ¾ × 12 ¼ inches)
Connector board	195(H) × 75(D) × 2(W)mm (7 ¾ × 3 × 1 inches)
Mass:	
Main board	Approx.550g (1lb. 3oz)
Connector board	Approx.200g (7oz)
Operating temperature:	+5°C to +40°C (41°F to 104°F)

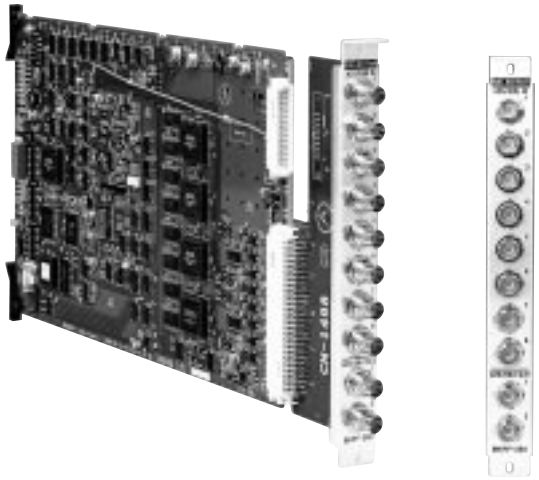
Input/Output connector and signal

Input video signal:	BNC × 8, 1.0Vp-p, 75Ω
Output video signal:	BNC × 2, 1.0Vp-p, 75Ω
Input return loss:	40dB or more
DG (1Vp-p 10 to 90% APL):	05% or less
DP (1Vp-p 10 to 90% APL):	05° or less
Frequency response: (100KHz to 8MHz)	±0.2dB
Cross talk (at 5MHz):	-50dB or less
S/N ratio (5 MHz low pass):	65dB or more
K factor:	0.5% or less
Tilt (line/field):	1% or less
DC offset:	±50mV or less

BKPF-350

Digital Audio 8x2 Selector Board

•A digital audio selector board with eight inputs (BNC-type) and two outputs (BNC-type) •Plug-in type to PFV-D10/D50A/D300/HD50A/HD300 interface unit •Remote control network with S-BUS •Flexible matrix size with cascade connection—up to 14 BKPF-350s are able to be integrated into a PFV-D300/HD300 interface unit to form a digital routing system of up to 112 × 2 •Status monitoring • Back-up of cross point information for 24 hours guaranteed



Supplied accessories:	Operation manual (1) Installation manual (1) Slot number label (1 set) Cascade cable (1)
Optional accessories:	Interface unit (Chassis) PFV-D300 Remote control BKS-R3205/R3206/R1607/R1608/R3209/R3210 Status display BKS-R3280/R3281

Specifications

General:

Power consumption:	DC +5V, 1.0A DC -5V, 0.2A 6W
Dimensions:	
Main board:	195(H) × 310(D)mm (7 ¾ × 12 ¼ inches)
Connector board:	195(H) × 75(D) × 25(W)mm (7 ¾ × 3 × 1 inches)
Mass:	
Main board:	Approx.550g (1lb. 3oz)
Connector board:	Approx.200g (7oz)
Operating temperature:	+5°C to +40°C (41°F to 104°F)

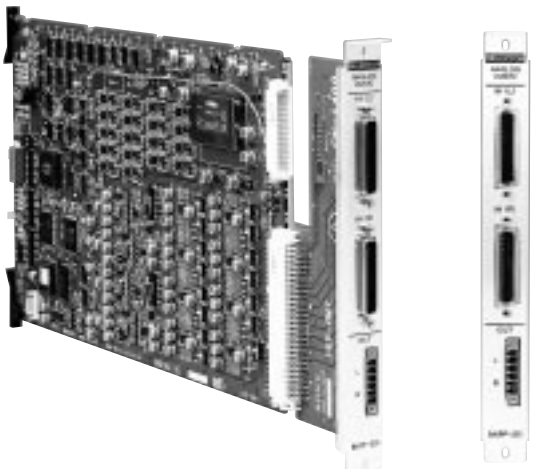
Input/Output connector and signal:

Input audio signal:	BNC × 8, 1.0Vp-p, 75Ω
Output audio signal:	BNC × 2, 1.0Vp-p, 75Ω
Transmission distance:	Max. 300m (984ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)
Rise/fall time:	37ns
DC offset:	±50mV or less

BKPF-351

Analog Audio 8x1 Selector Board

•An analog audio selector board with eight inputs (25-pin D-sub) and one output (6-pin D-sub stereo) •Plug-in type to PFV-D10/D50A/D300/HD50A/HD300 interface unit •Remote control network with S-BUS •Flexible matrix size with cascade connection—up to four BKPF-351s can be integrated into a PFV-D50A/D300/HD50A/HD300 interface unit to configure an analog routing system of up to 32 × 1 •Status monitoring •Back-up of cross point information for 24 hours guaranteed



Supplied accessories:	Operation manual (1) Installation manual (1) Slot number label (1 set) Cascade cable (1) D-sub 25 pin connector (2) (with SHELL) Audio connector (1)(with SHELL)
Optional accessories:	Interface unit (Chassis) PFV-D300 Remote control BKS-R3205/R3206/R1607/R1608/R3209/R3210 Status display BKS-R3280/R3281

Specifications

General

Power consumption:	DC +5V, 1.0A DC -5V, 0.6A 8W
Dimensions :	
Main board	195(H) × 310(D)mm (7 ¾ × 12 ¼ inches)
Connector board	195(H) × 75(D) × 25(W)mm (7 ¾ × 3 × 1 inches)
Mass:	
Main board	Approx.550g (1lb. 3oz)
Connector board	Approx.200g (7oz)
Operating temperature	+5°C to +40°C (41°F to 104°F)

Input/Output connector and signal

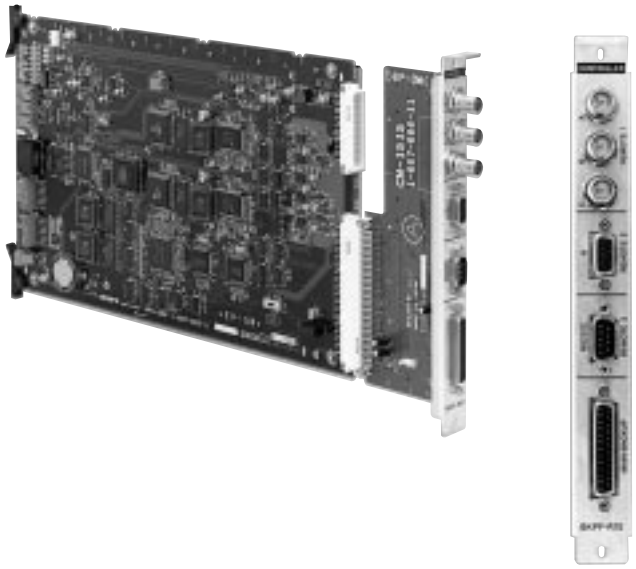
Input audio signal:	25-pin D-SUB × 2
Output audio signal:	6-pin D-SUB × 1 (stereo)
Input impedance:	20kΩ/600Ω(switchable)
Output impedance:	Approx. 22Ω
Standard input/output level:	+4dBm
Maximum input level:	+24dBm
Maximum output level:	+24dBm (600Ω balanced)
Frequencey response : (20Hz to 20kHz)	±0.1dB (1kHz +4dBm)
Distortion: (20Hz to 20kHz +24dBm output)	0.01%
Cross talk: (20Hz to 20kHz +24dBm input/output)	-80dB or less
S/N ratio (30kHz low pass):	105dB or more

ROUTING EQUIPMENT

BKPF-R70

Routing Switcher Controller Board

•Fully supports the primary station functions •Four times faster processing speed •Plug-in type to PFV-D Series •Controllable with Sony Cart+ Protocol via RS-422 •Plug-in and out freely with hot-swap function during power on •Redundant operation



Supplied accessories:	Operation manual (1) Installation manual (1) BZR-10, routing switcher data back-up software (1)
Optional accessory:	D-sub 25-pin connector cable with 60 cm long (1) (Parts No. 1-559-558-11)

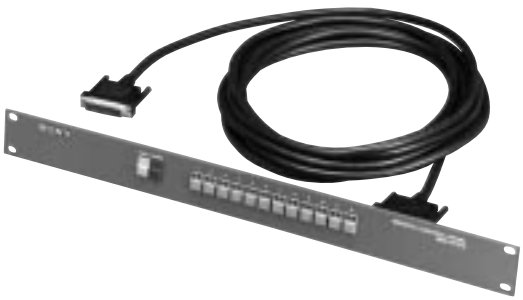
Specifications:

General

Power Consumption:	+5V DC: 0.7 A (Supplied from the PFV-D Series)
Dimensions:	192(W) x 317(L) mm (7 ⅝ x 12 ½ inches)
Mass:	Approx.520 g (1 lb 4 oz)
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Connectors	
Remote 1 (Connector type):	S-BUS (BNC × 3)
Remote 2 (Connector type):	RS-422A (D-sub 9-pin female)
Remote 3 (Connector type):	RS-232C (D-sub 9-pin male)
Protocol:	Terminal/ISR/Data Back-up

BKS-R1210

Remote Control Panel for DVS-V1201/A1201, BVS-V1201/A1201 (5m, 16ft)



BKS-R1607

Multi Display Control Unit

•Easily changes source name with selector knob •Four-digit display for each select button •Flexible button assignment to select source or destination •Selectable with the selector knob •Large select buttons classified with colors •Easily updates indication •Status display •Route function to show the expanded sources •Several crosspoints switchable with a button •Enhanced restriction of selected block •Search sources category-wise •Easy version-up of ROM •Sources and destinations expandable •Different sources for levels selectable •Single cable connection •Self-diagnosis •100V to 240V AC operation

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	10W
Operating temperature:	+0°C to +45°C (32°F to 113°F)
Power requirements:	100V to 120V, 50/60Hz (for USA and Canada) 100V to 240V, 50/60Hz (for other countries)
Dimensions:	424(W) × 44(H) × 150(D) mm (16 ¾ × 1 ¾ × 6 inches)
Mass:	Approx.3kg (6lb. 10oz)
Storage temperature:	+5°C to +40°C (41°F to 104°F)
Control signal:	Remote (BNC-type) (1) S-BUS
Data transfer method:	Bi-phase space
Data transfer rate:	312.5kbps
Transmission distance:	Max. 500m (1640ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R1608

Universal Control Unit

•Easily changes source name with selector knob •Four-digit display for each select button •Flexibly assign buttons to select source or destination •Large select buttons classified with colors •Easily updates indication •Route function to show the expanded sources •Several crosspoints switchable with a button •Easy version-up of ROM •Sources and destinations expandable •Single cable connection •Self-diagnosis •100V to 240V AC operation

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	10W
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100V to 120V, 50/60Hz (for USA and Canada) 100V to 240V, 50/60Hz (for other countries)
Dimensions:	424(W) × 44(H) × 150(D) mm (16 ¾ × 1 ¾ × 6 inches)
Mass:	Approx.3kg (6lb. 10oz)
Control signal:	Remote (BNC-type) (1) S-BUS (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5kbps
Transmission distance:	Max. 500m (1640ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3205

Source and Destination Control Unit

•This unit has level selection for breakaway function and a sixteen-character LED display in additon to BKS-R3204's functions.

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	12 W
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100 V to 120 V, 50/60 Hz (for USA and Canada) 100 V to 240 V, 50/60 Hz (for other countries)
Dimensions:	482(W) × 88(H) × 150(D) mm (19 × 3 ½ × 6 inches)
Mass:	Approx. 1.9 kg (4 lb 3 oz)
Control signal:	Remote (BNC-type) (1) S-BUS (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5 kps
Transmission distance:	Max. 500 m (1640 ft) (75 Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3206

X-Y Control Unit

•This is a multi-destination control panel which controls up to sixteen destinations, half of which are displayed by A/B selection button.

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	12 W
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100 V to 120 V, 50/60 Hz (for USA and Canada) 100 V to 240 V, 50/60 Hz (for other countries)
Dimensions:	482(W) × 88(H) × 150(D) mm (19 × 3 ½ × 6 inches)
Mass:	Approx. 1.9 kg (4 lb 3 oz)
Control signal:	Remote (BNC-type) (1) S-BUS (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5 kps
Transmission distance:	Max. 500 m (1640 ft) (75 Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3209

Universal Control Unit

•Flexibly assign button to select source or destination •Large select buttons classified with colors •Easily updates indication •Route function to show the expanded sources •Several crosspoints switchable with a button •Easy version-up of ROM •Sources and destinations expandable •Single cable connection •Self-diagnosis •100V to 240V AC operation

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	10W
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100V to 120V, 50/60Hz (for USA and Canada) 100V to 240V, 50/60Hz (for other countries)
Dimensions:	424(W) × 44(H) × 150(D) mm (16 ¾ × 1 ¾ × 6 inches)
Mass:	Approx.3kg (6lb. 10oz)
Control signal:	Remote (BNC-type) (1) S-BUS (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5kbps
Transmission distance:	Max. 500m (1640ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3210

X-Y Control Unit

•Up to 512 sources and 512 destinations controllable •Two selection methods: type-number selection and direct selection •Controllable up to eight levels •Selection using selector knob •Flexibly assigns buttons to select source or destination •Large select buttons classified with colors • Easily updates indication •Route function to show the expanded sources •Several crosspoints switchable with a button •Enhanced restriction of selected block •Search sources category-wise •Easy version-up of ROM •Sources and destinations expandable •Different sources for levels selectable •Single cable connection •Self-diagnosis •100V to 240V AC operation

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	10W
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100V to 120V, 50/60Hz (for USA and Canada) 100V to 240V, 50/60Hz (for other countries)
Dimensions:	424(W) × 44(H) × 150(D) mm (16 ¾ × 1 ¾ × 6 inches)
Mass:	Approx.3kg (6lb. 10oz)
Control signal:	Remote (BNC-type) (1) S-BUS (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5kbps
Transmission distance:	Max. 500m (1640ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3280/R3281

Single Status Display

•These are crosspoint status display units, used as under-monitor displays. •BKS-R3280 has a seven character display and BKS-R3281 has sixteen.

Supplied accessories: T bridge (1)
Key-top puller (1)
Key labels (1 set)
Operation manual (1)

Specifications

Power consumption:	11 W (BKS-R3280) 20 W (BKS-R3281)
Operating temperature:	+5°C to +40°C (41°F to 104°F)
Power requirements:	100 V to 120 V, 50/60 Hz (for USA and Canada) 100 V to 240 V, 50/60 Hz (for other countries)
Dimensions:	482(W) × 44(H) × 150(D) mm (19 × 1 ¾ × 6 inches)
Mass:	Approx. 2.4 kg (5 lb 5 oz) (BKS-R3280) Approx. 2.5 kg (5 lb 10 oz) (BKS-R3281)
Control signal:	Remote (BNC-type) (1)
Data transfer method:	Bi-phase space
Data transfer rate:	312.5 kps
Transmission distance:	Max. 500 m (1640 ft) (75Ω coaxial cable, BELDEN 8281 or equivalent)

BKS-R3281

BKS-R5001

S-BUS I/F Board for BZR-1000

•This is an IBM PC ISA board for controlling via Sony Serial-Bus.

BVS-A1201

Analog Audio Routing Switcher

•Twelve inputs and one output of stereo audio •Output transformer •25-pin parallel remote control from the BVE-9100/2000 or the optional BKS-R1210 •9-pin serial remote control •Independent 4 channel audio signal control using two units

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	10W
Dimensions:	424(W) × 88(H) × 350(D)mm ($16\frac{3}{4} \times 3\frac{1}{2} \times 13\frac{7}{8}$ inches)
Mass:	7.6 kg (16 lb 12 oz)

BVS-A3232

Analog Audio Routing Switcher

•32 input and 32 output matrix size •Simultaneous control of multiple signals •Two types of control systems are available — the Sony S-BUS system and RS-422A •Designated input and output line protect function •Phantom function •Self-diagnosis function •Additional functions when a BVS-A3232 designated as a secondary station — Crosspoint disable function, Password function, Name setting function, Virtual mapping function, Free assignment function and Tie line function •RS-232C port for external computer interface

Accessories supplied:	Operation manual (1) Installation manual for software (1) Maintenance manual (1) 75 ohm terminators (3) T-bridge (B) (1) D-sub connector screws (2) Audio connectors (32 sets)
Optional Accessories:	
Remote control units	BKS-R1607, BKS-R1608, BKS-R3202, BKS-3203, BKS-R3205, BKS-R3206, BKS-R3209, BKS-R3210,
Display units	BKS-R3280, BKS-R3281
Backup control board	BKDS-RS1690
Backup power supply unit	BKDS-PA3291
9-pin remote cables	RCC-5G (5 m), RCC-10G (10 m), RCC-30G (30 m)
Rack mount kit	RMM-30

Specifications

General

Power requirements:	AC 100 V to 240 V (10 %, 50/60 Hz
Current consumption:	1.2 to 0.6 A (with all optional boards installed)
Operating temperature:	+5°C to +40°C (+41°F to +104°F)
Mass:	16 kg (35 lb 4 oz) (with all optional boards installed)
Dimensions:	424(W) × 132(H) × 500(D) mm (16 3/4 × 5 1/4 × 19 3/4 inches)
Storage temperature	–20(C to +60(C (-4(F to +140(F)
Humidity	10 % to 90 % (No condensation)

Audio Signals

Audio signal input:	6-pin connector (× 16) for 32 inputs
Audio signal output:	6-pin connector (× 16) for 32 outputs
Input impedance:	100 k-ohm/600 ohm (selectable)
Standard input/output level:	+4 dBm
Maximum input level:	+24 dBm
Maximum output level:	+24 dBm (600-phm load, balanced)
Frequency response:	±0.1 dB (20 kHz to 20 kHz, 1 kHz, 4 dBm)
Distortion:	0.01 % (20 kHz to 20 kHz, with +24 dBm output)
Crosstalk:	Less than –80 dB (20 kHz to 20 kHz, with +24 dBm output)
Signal-to-noise ratio:	More than 85 dB (30 kHz LPF, nominal)

Input/Output Connectors

Reference audio signal input:	BNC type (2), high impedence, analog video signal, with loop-through

Remote control connectors

REMOTE 1 A, B ,C:	S-BUS BNC type (4), 47 k-ohm terminated, Data transfer method: BI-PHASE SPACE Data transfer rate: 312.5 kbps Signal transfer distance: 500 m (when using a BELDEN 8281 75-ohm coaxial cable or equivalent) Checksum: HDLC CRC-CCIT $X^{16} + X^{12} + X^5 + 1$
REMOTE 2:	Complies with RS-422A signal standard with loop-through D-sub 9-pin (2), 100 ohm/10 k-ohm Data transfer rate: 38.4 kbps
REMOTE 3:	Complies with RS-232C signal standard for onnecting a terminal D-sub 25-pin (fixed with M 2.6 screws) (1) 100 ohm/10 k-ohm
Terminal:	9600 bps, DTR control 8 bit, No parity, No check, 1 stop bit
ISR:	9600 bps 7 bit, ODD parity, 1 stop bit
AC power input:	3-pin AC IN connectors (2)

BVS-V1201 (NTSC/PAL)

Analog Video Routing Switcher

•Twelve inputs with loop-through and one output •REMOTE (optional)/LOCAL (standard) control panel •25-pin remote connector for parallel remote control from the BVE-9100/ 2000 or the optional BKS-R1210 •9-pin remote connector for serial remote control •RGB orY/R-Y/B-Y component signal process using three units•15-pin tally output

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	5W
Dimensions:	424(W) × 44(H) × 350(D)mm ($16\frac{3}{4} \times 1\frac{3}{4} \times 13\frac{7}{8}$ inches)
Mass:	5.6 kg (12 lb 6 oz)

BVS-V3232

Analog Video Routing Switcher

•32 input and 32 output matrix size •Simultaneous control of multiple signals * Two types of control systems are available — the Sony S-BUS system and RS-422A •Designated input and output line protect function * Phantom function •Self-diagnosis function •Additional functions when a BVS-V3232 designated as a secondary station — Crosspoint disable function, Password function, Name setting function, Virtual mapping function, Free assignment function and Tie line function •RS-232C port for external computer interface

Accessories supplied:	Operation manual (1) Installation manual for software (1) Maintenance manual (1) 75 ohm terminators (3) T-bridge (B) (1) D-sub connector screws (2)
Optional Accessories:	
Remote control units	BKS-R1607, BKS-R1608, BKS-R3202, BKS-3203, BKS-R3205, BKS-R3206, BKS-R3209, BKS-R3210
Display units	BKS-R3280, BKS-R3281
Backup control board	BKDS-RS1690
Backup power supply unit	BKDS-PV3291
9-pin remote cables	RCC-5G (5 m), RCC-10G (10 m), RCC-30G (30 m)
Rack mount kit	RMM-30

Specifications

General

Power requirements:	AC 100 V to 240 V ±10 %, 50/60 Hz
Current consumption:	1.2 to 0.6 A (with all optional boards installed)
Operating temperature:	+5°C to +40°C (+41°F to +104°F)
Mass	16 kg (35 lb 4 oz) (with all optional boards installed)
Dimensions	424(W) × 132(H) × 500(D) mm (16 3/4 × 5 1/4 × 19 3/4 inches)

Video Signal

DG	Less than 0.5 % (1 Vp-p, 10 to 90% apl)
dB	Less than 5((1 Vp-p, 10 to 90% apl)
Frequency response	±0.2 dB (100 kHz to 8 MHz)
Crosstalk	Less than –50dB (at 5 MHz)
Crosspoint delay	Less than ±1 % (between two inputs at 4.43 MHz)
Signal-to-noise ratio	More than 65 dB (5 MHz low pass)
Input return Loss	More than 42 dB
K factor	Less than 0.5 %
Tilt	Less than 1 %
Outiput gain stability	±0.1 dB

Input/Output Connectors

Reference video signal input:	
	BNC type (2), high impedence, analog video signal, with loop-through
Remote control connectors:	
REMOTE 1 A, B ,C:	S-BUS BNC type (4), 47 k-ohm terminated, Data transfer method: BI-PHASE SPACE Data transfer rate: 312.5 kbps Signal transfer distance: 500 m (when using a BELDEN 8281 75-ohm coaxial cable or equivalent) Checksum: HDLC CRC-CCIT $X^{16} + X^{12} + X^5 + 1$
REMOTE 2:	Complies with RS-422A signal standard with loop-through D-sub 9-pin (2) 100 ohm/10 k-ohm Data transfer rate: 38.4 kbps
REMOTE 3:	Complies with RS-232C signal standard for connecting a terminal D-sub 25-pin (fixed with M 2.6 screws) (1)
Terminal:	9600 bps, DTR control 8 bit, No parity, No check, 1 stop bit
ISR:	9600 bps 7 bit, ODD parity, 1 stop bit
AC power input:	3-pin AC IN connectors (2)

BZR-1000

GUI control/software

•This is a GUI control softwware for Sony Routing Swithcher System running on a PC with a BKS-R5001 board.

DVS-A1201

Digital Audio Routing Switcher

•Stand-alone switcher with a 12 input × 1 output stereo matrix •Two DVS-A1201 units provide four-channel audio operation •Conforms to the AES/EBU format with the 48.0kHz sampling frequency using XLR type connectors •Phase synchronization for AES/EBU input

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	18W
Dimensions:	424(W) × 88(H) × 350(D)mm ($16^3/_4 \times 3^1/_2 \times 13^7/_8$ inches)
Mass:	7.0 kg (15 lb 7 oz)

DVS-A3232

Digital Audio Routing Switcher

•Provides 32 × 32 stereo, or a 16 x 16 four-channel audio matrix in a single unit •The BKDS-A3220 optional cascade set enables various matrix sizes from 32 × 32 to 256 × 256 •Conforms to the AES/EBU format with the 48.0kHz sampling frequency using XLR type connectors •Phase synchronization for AES/EBU input •Optional backup control board and backup power supply for continued operation

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	50W
Dimensions:	424(W) × 310(H) × 450(D)mm (16 3/4 × 12 1/4 × 17 3/4 inches)
Mass:	20 kg (44 lb 1 oz)
Option boards:	BKDS-A3220 Cascade set BKDS-A3290 Backup control board BKDS-A3291 Backup power supply

DVS-RS1616 (525/60, 625/50)

RS-422A Remote Routing Switcher

•Provides sixteen RS-422A ports (D-sub 9-pin connectors) for inputs and outputs •Expandable up to 256 × 256 matrix size •Back-up systems for Power Supply and Control Board (option) •RS-232C port for external computer interface

Specifications

Power requirements:	AC 100V to 240V, 50/60Hz
Power consumption:	200W
Dimensions:	424(W) × 355(H) × 450(D)mm (16 3/4 × 14 × 17 3/4 inches)
Mass:	30 kg (66 lb 2 oz)
Option boards:	BKDS-RS1620 Cascade set BKDS-RS1690 Backup control board BKDS-RS1691 Backup power supply

DVS-TC3232 (525/60, 625/50)

Timecode Routing Switcher

•Provides thirty-two XLR-type connectors for SMPTE/EBU timecode inputs and outputs •Expandable up to 256 × 256 matrix size •Back-up systems for Power Supply and Control Board (option) •RS-232C port for external computer interface

Specifications

Power requirements:	AC 100V to 240V, 50/60Hz
Power consumption:	200W
Dimensions:	424(W) × 355(H) × 450(D)mm (16 3/4 × 14 × 17 3/4 inches)
Mass:	30 kg (66 lb 2 oz)
Option boards:	BKDS-RS1620 Cascade set BKDS-RS1690 Backup control board BKDS-RS1691 Backup power supply

DVS-V1201 (525/60, 625/50)

Digital Video Routing Switcher

•Serial digital input/output with BNC connectors •12 input and 1 output matrix size •Handles either serial component or serial composite signals •D-sub 25-pin parallel remote control to interface with optional remote control panel or BVE-2000/9100

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	20W
Dimensions:	424(W) × 43.6(H) × 450(D)mm (16 3/4 × 1 3/4 × 17 3/4 inches)
Mass:	5.6 kg (12 lb 6 oz)

DVS-V1616 (525/60, 625/50)

ISR Interactive Status Reporting

Digital Video Routing Switcher

•Serial digital inputs/outputs with BNC connectors •16 input and 16 output matrix size •Can operate in a combined environment of serial component and serial composite signals •Sony Serial-Bus networking for advanced control

Specifications

Power requirements:	AC 100 to 240V, 50/60Hz
Power consumption:	65W
Dimensions:	424(W) × 88(H) × 450(D)mm ($16^3/_4 \times 3^1/_2 \times 17^3/_4$ inches)
Mass:	8 kg (17 lb 10 oz)

DVS-V3232B (525/60, 625/50)

ISR Interactive Status Reporting

Digital Video Routing Switcher

•Serial digital inputs/outputs with BNC connectors •32 input and 32 output matrix size •Powerful control capability as the primary station, including Virtual Mapping, Free Assignment and Tie-line Management •Sony Serial-Bus networking for advanced control •Can operate in a combined environment of serial component and serial composite signals •RS-232C port for external computer interface •Back-up system for CPU (option) •Optional BZR-1000 routing switcher control software

Specifications

Power requirements:	AC 100V to 240V, 50/60 Hz
Power consumption:	190W
Dimensions:	424(W) × 221(H) × 550(D)mm ($16^3/_4 \times 12^3/_4 \times 21^3/_4$ inches)
Mass:	28 kg (61 lb 12 oz)

Option boards:	BKDS-V3290B	Backup control board
	BKDS-V3291B	Backup power supply unit
	BKDS-V3292B	Monitor board

DVS-V6464B (525/60, 625/50)

Digital Video Routing Switcher

•Serial digital inputs/outputs with BNC connectors •64 input and 64 output matrix size •Expandable up to 512 × 512 matrix size •Powerful control capability as the primary station, including Virtual Mapping, Free Assignment and Tie-line Management •Sony Serial-Bus networking for advanced control •Can operate in a combined environment of serial component and serial composite signals •RS-232C port for external computer interface •Back-up systems for power supply and CPU (option) •Optional BZR-1000 routing switcher control software •VCD-1C(1m)/2C(2m)/5C(5m)/10C(10m) Cascade Cable (option)

ISR Interactive Status Reporting

Specifications

Power requirements:	AC 100V to 240V, 50/60 Hz	
Power consumption:	400W	
Dimensions:	424(W) × 443(H) × 550(D)mm ($16\frac{3}{4} \times 17\frac{1}{2} \times 21\frac{3}{4}$ inches)	
Mass:	46 kg (101 lb 7 oz)	
Option boards:	BKDS-V3210B	Input board (32ch)
	BKDS-V3211B	Output board (32ch)
	BKDS-V3221B	Input expansion set
	BKDS-V3222B	Output expansion set (A)
	BKDS-V3223B	Output expansion set (B)
	BKDS-V6432B	Matrix board (64 × 32)
	BKDS-V3290B	Backup control board
	BKDS-V6491B	Backup power supply unit
	BKDS-V3292B	Monitor board
	VCD-C	Caseade cable